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M E M O R A N D U M

TO: LESTER SNOW

FROM: STUART PYLE

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SUBJECT: Comments on Formulation of Alternatives

After the December 4 Workshop I was somewhat dissatisfied with what I saw and heard about the formulation of alternatives as it seemed the process lacked a foundation of clear principles to guide it. I tried then and am still trying to think of ways for improving it. I felt somewhat better after the second discussion at the BDAC meeting, even though that meeting did not get into the detail of the Workshop.

The steps leading up to this point have been orderly and well reasoned, resulting in good coverage and analysis of the problems, objectives and potential actions. I question whether the desire to formulate alternatives on the basis of relieving conflicts will provide a way to really work well. I have been reviewing the CALFED/BDAC background information for the purpose of putting together a presentation to the Kern County Water Agency Board. A review of the steps makes me wonder if what we were seeing at the December 4 workshop was more an example of defining a strategy Step 4 than an actual alternative. Assembling the proposed actions as strategies when they are undefined as to a quantified description, a quantified accomplishment and without costs or benefits seems more acceptable.

You commented to me in your letter about my concern over identifying the State Water Project water supply problems, that these require a finer level of detail than being used at this stage. It may be that attempting to assemble the potential categories and actions in the absence of any "metrification", as Dick calls it, can only be done as a strategy rather than an alternative. Then launch into alternatives with more detail

I have some concerns about the "boundary" concept and whether it is practicable to attempt to array hundreds of alternatives in the name of conflict resolution. I don't know if I could differentiate among the alternatives necessary to define 32 starting points. Coming from the slide rule age, I find some comfort in thinking linearly. For instance, set up an array with the best alternative for environmental and fishery purposes at one end as compared to the best to serve the water supply functions at the other, both within the operating conditions of the present accord. Other sets of alternatives can accentuate the best results for water quality, levee vulnerability, etc. After defining what is best, optimum, achievable or whatever for each of the major objectives, set by set, it should be possible to sort out the impacts and assemble the short list for more study and final decisions.

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I don't think you can get very far into the process without doing some quantification and ,yes, metrification. For each real alternative there should be a logical premise set up in the beginning as to what is desired to be accomplished, and there should be some way to estimate the accomplishments of the alternative once it is in place. This will be tough to do but given the level of the planning, I think you just have to rely on expert opinion in a lot of cases to do it. (I've worked with biologists and economists long enough to know that no two will agree, but,still, you just have to put numbers on paper. The Feds also have a system where the environmentalists all go out in the field together and stand around and guess numbers until all give up except one.)

If your team has not done it I think it would be worth while to spend some time revisiting the SCRUB--Separable Cost Remaining Benefit method of project formulation. This requires that you consider single purpose works and develop an array of sizes to get to maximum net benefits. I'm not suggesting you do this, but that arrays of sizes and building block increments could be a help in shaping alternatives and making changes to modify accomplisments, costs and impacts. I'm not suggesting that you use the economic approach of the SCRUB method, but rather consider the building block way of making alternatives. The level of detail for evaluating alternatives does not have to be great. It may be possible to mimic the process without the detail.

Lastly, during the summary of the breakout session of the workshop, I made some comments that the team seems to be favoring environmental solutions and ignoring or downplaying water supply improvement options.I was concerned about the lack of balance in the alternative being discussed. I later decided the alternative selected was merely an example and was not intended to be balanced. I hope that is right. Nevertheless, during the entire process up to now the whole focus of the process seems directed only towards environmental aspects of the Delta problems. When I asked about reviewing internal Delta water flow patterns, it is because I feel this is a subject that is being ignored. Fish habitat, water quality and water supply availability are all related to how water moves through and around the Delta channels. I see nothing in the problem definition that would indicate a need for actions to separate water flowing to the export pumps from water important to the habitat. I think there is a need to formulate alternatives to emphasize the needs of each the four objectives as they would be in the absence of conflict with the others as done in the single purpose plans of the SCRUB method, and then array these either linearly or universally to work out the conflicts among various alternatives. However you decide to do it, there needs to be some balance among alternatives brought in and a need to give water supply and water quality as sound an airing and understanding as now being presented for environmental issues. I really don't see equal treatment for the water supply and water quality objectives so far.

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